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AUTHOR Pianta, Robert

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ABSTRACT

This paper presents an expanded definition of school readiness that includes the skills children possess as they begin formal school as well as the ways that family backgrounds, preschool experiences, and primary-grade classrooms interact with children to point them toward school success or failure. The paper notes five dimensions of school readiness as put forth by the Resource Group on School Readiness of the National Education Goals Panel: physical well-being, emotional maturity, social confidence, language richness, and general knowledge. The paper asserts that a well-informed approach to improving children's school readiness must deal with three core questions: (1) What are the competencies that children bring with them to school? (2) How do early educational environments shape these competencies and how can we improve the competencies children bring to school? and (3) How do kindergartens and first grades respond to and build upon these competencies? Discussion of the competencies children need and the extent to which they have such capabilities at school entry focuses on literacy and language, and social and self-regulatory competencies. Characteristics of early educational environments shown to facilitate growth in these important competencies for school success are described as they relate to home experience; participation in high-quality prekindergarten programs, especially for poor children; and child-teacher interactions. The lack of consensus about how to deliver instruction in early education settings is also noted. Discussion of the impact on schools and classrooms on young children's competence focuses on providing access to instruction, providing the right kinds of instruction to all children, customizing the kindergarten classroom, and school readiness in the next decade. (Contains 41 references.) (KB)

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Robert Pianta

Educational Research Service

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The Informed Educator Series

School Readiness:

A Focus on Children, Families, Communities, and Schools

This *ERS Informed Educator* was written by **Robert Pianta, Ph.D.** who is the William Clay Parrish Jr. Professor in the Department of Human Services in the area of Clinical and School Psychology, University of Virginia. He serves as a principal investigator on *The NICHD Study of Early Child Care and Youth Development*, a longitudinal study of the effects of family factors, child care, and schooling on the development of more than 1,300 children now in 5th grade, and with *The National Center for Early Development and Learning*, conducting research on the transition to kindergarten.

For eight years, Dr. Pianta directed the Infant and Family Intervention Training Project, which provided interdisciplinary specialty training in early intervention and has grown into a teacher-training program in Early Development and Risk. Dr. Pianta is also editor of *The Journal of School Psychology*, and is on the editorial board of *School Psychology Review*. He consults with numerous foundations regarding early childhood issues and with state and federal agencies on policy and research related to young children.

Few aspects of American education have received the attention and focus that school readiness has over the past 10 years. The nation's educational spotlight has been trained on young children, starting over a decade ago with the announcement that the first of the National Education Goals was to ensure that all children enter school prepared to learn. More recently, we have seen a rapid rise in the numbers of publicly funded pre-kindergarten programs designed to improve children's likelihood of success in elementary school (Meisels 1999; National Research Council [NRC] Committee on Early Childhood Pedagogy 2001; Shonkoff and Phillips 2000).

We know that quality early education experiences in families, childcare, preschool, and early elementary settings help prepare children to succeed later in school (Meisels 1999; NRC 2001; Shonkoff and Phillips 2000). It would seem fairly easy to move from such a clear statement to a set of policies and practices that ensured that all children did enter school prepared to learn. But as in many areas of education, there is a large gap between possibility and reality. In many ways, this gap reflects a lack of knowledge about school readiness.

This *ERS Informed Educator* presents an expanded definition of school readiness that includes not only the skills children possess as they begin formal schooling, but also the ways that family backgrounds, preschool experiences, and primary-grades classrooms interact with children to point them on the road to school success or failure.

What Is School Readiness?

Different groups of educators and community members see the issue of readiness from different angles and focus on different issues. Special educators often focus on the need for screening to identify children with disabilities. School board members worry about the cost of pre-kindergarten programs and the value of getting into the business of operating preschools. Principals wonder about how to integrate programs for three and four year olds into K-5 elementary schools. Parents see the value of high-quality programs and often

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Dimensions of Readiness

One of the first tasks of the Resource Group on School Readiness of the National Education Goals Panel was to discuss the "dimensions of school readiness." The members found,

> not surprisingly, no agreed-upon definition. Many professionals insist that the focus should be primarily on verbal skills; others emphasize general knowledge, while still others look at the child's "developmental maturity" for school. We conclude that readiness does indeed involve the whole child. It relates not just to verbal proficiency, but also to emotional maturity, social skills, attention span, and, at the most fundamental level, the child's physical condition. Specifically, we propose a view of school readiness that embraces...five dimensions.... Clearly, readiness should not be narrowly defined. Rather, it should be viewed as a pattern of qualities, a cluster of conditions and characteristics that, taken together, enable children to take full advantage of the opportunities and demands of formal schooling (Undated).

The five dimensions identified by the group included physical wellbeing, emotional maturity, social confidence, language richness, and general knowledge.

want more and better resources. Teachers wonder about the best way to teach and design programs for young children. Instead of looking at these issues using a wide-angle lens, separate initiatives address different pieces of the puzzle, and in the end, little progress is made.

At its core, readiness is multifaceted, complex, and systemic, combining:

- a child's experiences at home and the resources of the home;
- the resources and experiences present in child care and preschool settings attended by the child;
- community resources that support high-quality parenting and child care;
- the extent to which the elementary school is well linked to these family and child care resources; and
- the degree to which the classroom experiences provided for the child in kindergarten and first grade effectively build on competencies he or she brings to school (Love, Aber, and Brooks-Gunn 1992; Pianta and Walsh 1996; Meisels 1999).

What many people refer to as readiness for school (the child's skills when he or she enters kindergarten or takes a screening test) is only part of this process.

The definition of school readiness that serves as the basis for this *Informed Educator* calls attention to the fact that children's skills are developed: 1) *over time* and 2) *in context.* Although complex, this definition moves the focus away from isolated measures of an individual's child's performance, and forces attention on efforts to improve the ways homes, child care settings, and classrooms contribute to children's competencies.

In practical terms, this means that efforts to assess and improve school readiness must be broad-based and focused on the settings and resources to which children are exposed from very early in life. Unfortunately, most communities' efforts in this regard are fragmented, and many schools' efforts focus solely on whether children know their colors or their alphabet (Love, et al. 1992; Meisels 1999).

To address the many issues involved in increasing the odds of children's success in their early years of elementary school, we must pay careful attention to three core questions:

1) What are the competencies that children bring with them to school?
2) How do early educational environments shape these competencies, and what can we do about improving the competencies that children bring with them to school?
3) In what ways do kindergartens and first grades respond to and build upon these competencies in classroom settings? Basically, what differences do schools make?

A well-informed approach must deal with all three of these questions—not one or another in isolation. For example, when communities institute pre-kindergarten screenings or provide preschool programs without at the same time addressing how

the kindergarten and first-grade instructional program integrates with screening or curriculum at the preschool level, the resulting approach will be less productive than if these initiatives had been better integrated.

Thus, our focus in this discussion must be on *both* children's competencies and the ways early education and school settings provide opportunities and resources to enhance those competencies.

Understanding the Competencies Children Need

The competencies that children demonstrate as they come to school are the most immediate and obvious indicator of the complex process of development-in-context that has produced a certain degree of school readiness over time. A great deal of attention is focused on understanding, assessing, and positively influencing these competencies.

Clearly, any comprehensive effort related to school readiness requires an adequate understanding and assessment of children's skills (Meisels 1999). Such assessments, when conducted at repeated and regular intervals over time, are like taking the temperature of the community with regard to its efforts to enhance children's development—in other words, they tell us how well the community is doing its job (Love, et al. 1992).

Several factors make it difficult to evaluate the developmental or educational significance of the skills and behaviors children demonstrate when they are two, three, four, or five years old. At these ages children's skills are notoriously embedded in the interactions they have with people (mostly adults) and materials in the settings in which they participate. We learn more about young children's functioning when we observe how they interact with parents, teachers, and objects than we can through testing them on a single occasion. In addition, the best estimates indicate that *academic and cognitive skills* assessed through performance on tests or from questionnaires are only moderately stable from the preschool through early elementary years, while the stability of *social and behavioral competencies* is quite low (La Paro and Pianta 2001).

What skills are actually key to later functioning, and should therefore be the focus of early assessment and intervention efforts? Answers to this question come from two sources.

One body of research assesses children's competencies as they come to school and then predicts how they will do later in their school careers (Entwisle and Alexander 1999; Pianta and McCoy 1997). Much of the rationale for attention to school readiness programs is based on years of evidence from these studies, showing that when children demonstrate or fail to demonstrate certain skills early in their school careers, they are more or less likely to succeed later in school.

The second source of information is extensive national surveys of kindergarten teachers, who describe the skills they believe are essential to success in their classrooms (NCES 2000; Rimm-Kaufmann, Pianta, and Cox 2000). Teachers' judgments are important. If a teacher thinks a child is "not ready" for any reason, a whole cascade of consequences may result, many of which can shape a child's school career—including referral for special education assessment, retention in grade, or assignment to a variety of early intervention/prevention programs. At a different level, a teacher's beliefs about what skills are typical or normative for beginning kindergarteners (for example) shape that teacher's instruction and provide a backdrop for his or her judgments about individual children. Therefore, any discussion of readiness skills must also include teachers' views about those skills.

Both longitudinal and survey studies yield a wealth of information about the competencies needed for school success. For example, with regard to academic readiness skills, children are more likely to succeed in school when they display early forms of literacy skills like rhyming or telling a short story, when they grasp a range of general knowledge facts, and when they can do things like count to 10 or draw simple pictures (Adams 1990; Entwisle and Alexander 1999).

In addition to these pre-academic skills, the research agrees that children need skills in social and emotional areas. School readiness is more than knowing your ABCs. Children who communicate effectively, who follow directions and cooperate, who are attentive, enthusiastic, and actively involved in classroom activities, and who can ask for and receive help demonstrate a cluster of skills we could call "teachability." If they have this competency, they are likely to benefit from the resources provided to them in a kindergarten or first-grade classroom, regardless of what academic skills they have (Birch and Ladd 1998; Pianta and Walsh 1996). Kindergarten

teachers clearly place at least as much value on social and emotional competencies like communication and attentiveness as on academic skills, and research shows that even children with solid early academic skills can struggle in school because of problems in social areas (Rimm-Kaufmann, et al. 2000).

Readiness definitions, early education efforts, and policies and programs that aim to enhance children's skills should target *both* pre-academic skills, especially those related to literacy, and socio-emotional competencies. The following discussion provides details about both of these areas.

Literacy and Language Competencies

There are two key components of literacy as children enter school: 1) their facility with language in naturalistic settings and interactions, such as the ability to "converse" with other children and adults; and 2) their ability to decode printed word-units into smaller, phonologically coded units of letters and sounds (Adams 1990).

Narrative and discourse skill. Most of the language used by teachers is logically connected into topics and narratives; it requires that children be able to make the logical links among sentences and understand reference to past and future talk. In addition, children must be able to sustain attention to narrative and discourse information if they are to process the information effectively. Thus, discourse/narrative ability coupled with sustained attention is necessary for understanding the stories, narratives, and directions that surround children in school (Vernon-Feagans 1996).

Vocabulary size has also been suggested as an indicator of literacy (Hart and Rizley 1995). Children's skills build on their knowledge of the world and the store of information they have available. A recent study of a group of Black, low-income children suggested their vocabulary was so small that they would probably never catch up to their more-advantaged peers (Hart and Risley 1995). The adults who interacted with these children rarely asked them questions (Feagans and Farran 1996), again emphasizing that language and literacy has its roots in social interactions with adults.

Phonological awareness. Young children also need to recognize the relationship between alphabetic symbols and spoken language (Adams 1990). To perform this task, a child must be aware that the spoken word is composed of individual sounds. This conscious awareness of the sound structure of language and the ability to manipulate phonological segments, called "phonological awareness" (Blachman 1994), appears to be a key skill in learning to read proficiently. Improved phonology fosters improved reading, and vice versa (Bryant et al. 1990).

Early problems with phonological awareness have cumulative adverse effects and can lead to reading disability and underachievement in literacy and literacy-dependent content areas. Beginning readers need to have knowledge both of phonological segments and of letters in order to develop word recognition abilities; neither alone is sufficient. Many beginning readers, unfortunately, do not have this knowledge, and children from homes with lower incomes may be most at risk (Adams 1990). Pre-readers with the poorest phoneme segmentation skills are most likely to become the poorest readers (Blachman 1994).

> "Children who are socially and emotionally ready for school generally have improved school outcomes, better odds of later school and vocational success, better later social and emotional development, and an easier time developing relationships with their peers" (Peth-Pierce undated, 2).

Social and Self-Regulatory Competencies

Social competencies and self-regulation skills (for example, sustained attention and persistence, frustration tolerance, appropriate help-seeking and following directions, emotion regulation, and social skills) influence how a child can make use of interactions with adults and peers in classroom settings and are primary indicators of adjustment in those settings.

Attention. The basic cognitive process of attending to incoming information supports exploration, acquisition of information, memory, and social interaction (Barkley 1994). Children who attend to a task and to the teacher/adult can process the information necessary to complete the task, and they tend to have better achievement in school (McKinney and Feagans 1987; Pianta and Harbers 1996). Difficulties in attending and focusing on any of a variety of

classroom tasks (academic or social) are a major concern for teachers and a primary indicator of adjustment problems and referrals for retention or special education (Rimm-Kaufmann, et al. 2000).

Emotional and Social Competence in Relationships. As noted above, school readiness is embedded in interactions between children and adults (Love et al. 1992; Meisels 1999; Pianta and Walsh 1996; Ramey and Ramey 1999). Thus, one focus of readiness assessment is the child's interaction with caregivers (Pianta, Smith, and Reeve 1991). Unfortunately, for many children, family and adult-child interactions clearly predict problems in emotional, academic, and social behavior in school (NICHD ECCRN in press a).

There is growing consensus that the poor quality of social experience for large numbers of children (particularly children in poverty) accounts for much of the link between poverty and the poor school outcomes (Funders and Agencies Work Group 1999). Relationships between children and adults play a prominent role in the development of competencies in the early years (Birch and Ladd 1998; Pianta and Walsh 1996) and form the "developmental infrastructure" upon which school experiences build.

The quality of these relationships appears to depend on the skill of the adult to read the child's signals accurately, respond appropriately to these signals (e.g., to "follow the child's lead"), convey acceptance and emotional warmth, offer assistance as necessary, model regulated behavior, and provide appropriate structures and limits for the child's behavior. For their part, children's competence in these situations depends on paying attention to the adult, engaging with the adult and the task at hand in a positive way, seeking appropriate help, and offering clear signals to the adult. These competencies (both child and adult) play important roles in peer relations, emotional development, and self-regulation (Denham and Burton 1996). They affect school competencies such as attention, motivation, problem-solving, and self-esteem (Birch and Ladd 1998; Pianta and Harbers 1996).

What Competencies Do Children Have?

We know a lot about the skills that enhance children's likelihood of success in the early years of school. But how many children show these capabilities?

Large-scale national surveys of children's skills, such as the Early Childhood Longitudinal Study, indicate that children vary widely in both the socio-emotional and the pre-academic competencies they bring to school (NCES 2000). For example, some children can read short books and perform simple computations when they enter kindergarten, while others (as many as 25 percent) have great difficulty identifying letters or sounds. However, this study also demonstrates quite convincingly that nearly all children, regardless of their initial skill levels, make progress during the kindergarten year.

Regarding social and emotional competencies, a recent nationwide survey asked kindergarten teachers to estimate the percentage of children in their classrooms in recent years who showed moderate or serious problems adjusting to school (Rimm-Kaufmann, et al. 2000). On the whole, this sample of kindergarten teachers believed that almost half of children entering school showed moderate or serious problems in adjustment. See the table on page 6 for details.

Improving Early Educational Environments

Given what we know about competencies that are important for school readiness, what kind of experiences and opportunities in families, early education, or pre-kindergarten child care settings facilitate growth in these areas?

A generation of research studies describe relations between experiences in early education settings and child competencies. Some of these studies involve experimental evaluations of intervention projects, others are naturalistic studies of children in a range of typical settings (NICHD ECCRN in press a; Ramey and Campbell 1984; 1991; Ramey and

> "While first-time kindergartners are similar in many ways...They demonstrate differences in their cognitive skills and knowledge, social skills, health, and approaches to learning, and bring with them differences in their home educational experiences and environments" (West, Denton, and Germino-Hausken 1998).

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Percentage of Teachers Who Say That "About Half Their Class or More" Enter Kindergarten with Specific Problems (N=3,595)

Problem	Percentage of Teachers
Difficulty following directions	46
Lack of academic skills	36
Disorganized home environment	35
Difficulty working independently	34
Lack of any formal preschool experience	31
Difficulty working as part of a group	30
Problems with social skills	20
Immaturity	20
Difficulty communicating/language problems	14

Source: Rimm-Kaufmann, et al. 2000.

Ramey 1999). Across all this work several themes stand out:

Importance of Home Experiences

The experiences that children have in their homes with their families are by far the most important influence on the readiness competencies described earlier (NICHD ECCRN in press a). Naturalistic (non-intervention) studies in which family attributes and inputs as well as child care and early education attributes and experiences have been assessed clearly indicate that factors such as parents' educational level and attitudes, parents' mental health (particularly depression), and qualities of the interactions that children have with parents contribute far more to the differences between children's readiness competencies than do their experiences in child care and early educational settings they attend.

In particular, parents' (especially mothers') sensitive interactions with their children are an important developmental "input" to the growth of pre-academic as well as social and behavioral competencies. Sensitive parenting, assessed through observations of mother-child and father-child interactions from birth to age four, predicts skills such as emergent literacy attentiveness and task orientation, persistence, social skills with peers, self-control and emotion regulation, language and communication skill, and a range of pre-academic skills. In many ways these findings affirm the contention that interactions with adults (particularly parents) are the engine of developmental growth (Shonkiff and Phillips, 2000.)

Importance of Participation in High-Quality Prekindergarten Programs

Attendance in early education and pre-kindergarten programs that emphasize and support stimulating, child-focused interaction is associated with higher scores on a variety of social, emotional, and pre-academic competencies. Such interactions occur when a child and teacher converse about the child's experience, read together, or work on a puzzle or project of interest to the child (Cost, Quality and Outcomes Study Team 1995; NICHD ECCRN in press a). However, the effects are not as strong as those for interactions with parents.

> While no single curriculum or pedagogical approach can be identified as best, children who attend well-planned, high-quality early childhood programs in which curriculum aims are specified and integrated across domains tend to learn more and are better prepared to master the complex demands of formal schooling (Bowman, Donovan, and Burns 2000, 6).

These types of interactions are more likely to occur in child care and early education settings that emphasize staff professionalism, provide training in early education and care, and have experienced staff with degrees in child development, education, or related fields (NICHD ECCRN 1999). Thus, school district decisions about how to structure and staff programs for pre-kindergarten and preschool-age

Key Features of a High-Quality Preschool Program

A Southern Regional Education Board analysis of 10 high-quality preschool programs identified "appropriate curriculum models and learning processes" as a key characteristic:

> High-quality preschool programs use curriculum models and learning processes that create an engaging, responsive environment that helps each child learn and develop. They set curriculum goals across various disciplines, with an emphasis on language arts and mathematics. They also incorporate various teaching strategies that are most effective for each child's learning style and stage of development.
>
> A policymaker or other observer with limited background in child development and early childhood education can find it very difficult to tell a good pre-school classroom from a bad one. In both cases it may appear that children simply are playing. In a bad classroom, that actually may be all they are doing: simply playing, without direction from or engagement by teachers.
>
> In a good classroom, on the other hand, what appears to be play will be anything but simple. A teacher who knows not only about children in general but also about the individual children in his or her classroom constantly will prompt children to ask questions and make choices. The teacher will provide hands-on materials that are carefully chosen to raise each child's learning level and take advantage of the child's interests. The teacher also continuously will monitor and adjust what is being taught to allow for young children's limited attention spans. While the children think they simply are playing, the teacher will be well aware of how hard he or she is working (Denton 2001, 22-23).

children are important. These decisions can influence the extent to which that program will provide high-quality developmental inputs that benefit children's growth and functioning.

To the extent that programs for young children are intentionally organized to provide high-quality experiences and opportunities, for example by having well-trained staff, or by using well-validated approaches for enhancing social or academic competencies, children will benefit more. Evidence suggests that intentional, appropriate, child-focused teaching and learning opportunities in socio-emotional skills or early literacy skills relate to increased skill in those areas (NICHD ECCRN in press a; Ramey and Campbell 1984; 1991).

Special Importance of High-Quality Prekindergarten for Poor Children

A caveat to the point about the primacy of family influences is that several studies of experimental interventions that provide high-quality early education and care experiences to children from disadvantaged and poor families suggest that experiences in high quality out-of-home settings can be extremely valuable and as influential as experiences at home for supporting readiness skills and early school success (Ramey and Campbell 1984; 1991).

The relative gains from attendance in such programs are on the order of 5-7 points on standardized measures of achievement. Such gains require ongoing support once the child enters school in order to be maintained, but can be critical to early school success. Children from more disadvantaged backgrounds are likely to benefit even more from such programs than are children from middle-class backgrounds whose experiences at home will most likely provide them with the requisite developmental input for school readiness.

Thus, the issue of whether home or child care is more or less important in determining children's readiness should not be viewed as a "either/or" dichotomy. Instead, it should be understood in terms of the extent to which experiences across both settings ensure that the child is exposed, for a fairly long period, to sensitive, developmentally stimulating interactions with a consistent adult.

Importance of Child-Teacher Interactions

The vast majority of opportunities for learning social or academic skills in early education and prekindergarten settings occur in the context of interactions with the teachers (Graue 1999). The social quality of interactions between child and teacher in the pre-kindergarten years helps build the competencies that are valued by kindergarten teachers—

Teacher Expertise is the Crucial Ingredient for Early Childhood Programs

Children's cognitive growth and language development are primarily influenced by the daily interactions between children and the adults who are guiding their learning opportunities. Quality depends on the expertise of adults in listening to, observing, talking with, and asking questions of children over time. How able is the teacher to use a child's interests and daily activities to extend vocabulary, introduce numeracy concepts, and reinforce language sounds that are the building blocks of reading? How facile is the teacher in observing signals that suggest a child is ready for new cognitive challenges? While the classroom setup and materials available to children are important elements of quality, it is the teacher's ability to help the child learn about his or her environment on a daily basis that makes a long-term difference for learning (Dwyer, Chait, and McKee 2000, 6).

following directions, attending to and enjoying learning activities, and communicating effectively. Therefore, enhancing the nature and quality of social interactions between adults and children in the preschool years can be of great value to ultimately enhancing key child competencies that are valuable in elementary school classrooms.

Lack of Consensus About How to Deliver Instruction

Although researchers and practitioners agree on the value of enhancing the social and emotional quality of early education settings, they do not always agree on whether or how to infuse these settings with academics. Should early education programs directly expose children to instruction and structured interactions designed to build academic skills, or encourage the development of these competencies through active exploration and play (Graue 1999)? A great deal of attention is currently being directed at this area. States that are implementing pre-kindergarten programs for three and four year olds are struggling with curriculum and instructional issues that reflect the tension noted above.

What Differences Do Schools and Classrooms Make?

The developmental/ecological framework described toward the beginning of this *ERS Informed Educator* views the schools and classrooms that children enter as a key facet of school readiness. Thus, any efforts to understand, assess, or improve school readiness must take seriously the need to understand, assess, and improve the opportunities and resources provided to children by schools and classrooms (Pianta and Walsh 1996). Because children's competencies are so embedded in the settings in which they participate, we simply cannot, once a child enters school in kindergarten, approach those competencies as if they were properties of the child and independent of the child's ongoing experiences in school.

Providing Access to Instruction

Children do benefit from attendance in kindergarten, as the Early Childhood Longitudinal Study data has clearly shown. Even though beginning kindergarteners' skills ranged from having no exposure to literacy all the way to reading books, the children, on average, showed gains in literacy across the year (NCES 2000). The research also suggests that with more exposure to educational programming, such as attendance in summer programs or year-round schools, children do better—particularly those from less-advantaged backgrounds.

Providing the Right Kinds of Instruction to All

We also know, particularly from recent large-scale observational studies, that actual experiences in kindergarten and first-grade classrooms are highly variable, and that these differences have important implications for what and how much children learn (NICHD ECCRN in press b; Pianta, et al. 2001). In one study, children were observed in more than 800 first-grade classrooms in 295 school districts in more than 30 states (NICHD ECCRN in press b). The classrooms varied greatly in the extent to which

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they made productive use of time, were well-managed, and exposed children to systematic literacy instruction based on research—for example, instruction in phonological processes.

Importantly, as in early education and pre-kindergarten settings, all the classrooms in this observational study engaged children in academic work that could be characterized as socially and emotionally supportive, where teachers were sensitive to children's social and emotional needs, in addition to being providers of instruction (NICHD ECCRN in press; Pianta et al. 2001).

In short, available observational data suggest that children's experiences in early elementary classrooms vary almost as much as the children do when they enter these classrooms. Is this variation in classrooms tailored to children's needs, or simply a function of a lack of consensus on how and what to teach young children? We don't know, and this question is in need of serious attention. However, these findings do suggest that there is much more agreement on how to provide supportive social and emotional classroom settings for young children than there is on how to provide academic instruction.

Customizing the Kindergarten Classroom

In addition, the mismatch between teacher expectations for kindergartners and kindergartners' skill levels that sometimes occur when beginning the year point to another area that needs attention. Rimm-Kaufman, Pianta, and Cox (2000) speak to this issue in their summary of their survey of almost 3,600 kindergarten teachers:

> the high rate of teacher-perceived adjustment problems may reflect a poor "fit" between children's competencies and aspects of the kindergarten classroom context, including teachers' expectations and classroom demands. These findings call attention to the need to better align children's competencies, their home environments, and their kindergarten teachers' expectations during this period of school entry. Furthermore, they highlight the importance that kindergarten teachers view children as individuals with distinctive sets of preschool experiences, cultural values, and skills rather than on a one-dimensional scale of "readiness". . . Consistent with the goal that all children enter school "Ready to Learn" is that the National Education Goals Panel has been promoting strategies to prepare children to be ready for school and to prepare schools to be ready for children (National Education Goals Panel, 1998). These strategies target the disjunction between teachers' expectations and children's competencies, a timely issue in light of this large, national survey of kindergarten teachers. Finally, such transition policies and practices must be examined in light of the apparent discontinuities experienced by children and their families, schools, and communities as children leave one educational system, that of homes and preschools, and enter another, that of kindergarten and elementary school (163).

School Readiness in the Next Decade

Two movements serve as a context for interpreting these remarks on *school* readiness because they will shape the policies and practices related to educating young children for the foreseeable future. These are: 1) the proliferation of state and locally funded pre-kindergarten programs for four year olds, and increasingly three year olds; and 2) the current emphasis on accountability in education.

Making Schools Ready for Children

The North Carolina Ready for School Goal Team identifies "ready kids" and "ready schools" as two interlocking pieces of the school readiness "puzzle." The four cornerstones of ready schools included:

- Knowledge of growth and development of typically- and atypically-developing children
- Knowledge of the strengths, interests, and needs of each individual child
- Knowledge of the social and cultural context in which each child and family lives
- The ability to translate knowledge about development into developmentally appropriate practices

Other key elements included: ready teachers, ready school environments, ready curriculum and instruction strategies, and ready administrators (2000, 11).

With regard to publicly funded early education programs for young children, currently more than a million four year olds are now served under the auspices of the public schools. This number continues to increase (NCEDL 2002). The public clearly supports these programs, and has willingly invested in their growth and development in more than half the states. Some form of formal pre-kindergarten program for three or four year olds either is, or soon will be, the norm. The elementary school of the future is very likely to start at age three.

Given the potential benefits of attendance in early education programs, the pre-kindergarten movement holds great potential to contribute to the readiness of the nation's schoolchildren. However, it will be crucial to ensure that early childhood and preschool programs offer children the best possible quality of experience and opportunity, and that children's experiences in kindergarten and beyond further build upon their competencies.

Finally, our current approach to educating children places a high value on accountability and emphasizes standardized assessments of children's academic skills, often starting in third grade. As a consequence, it is imperative to increase the likelihood of children's exposure to high-quality learning and educational settings as early as possible. As we do so, however, we must recognize that efforts to enhance social and emotional competencies of children are of equal value for success in school, even though they are not the focus of accountability assessments. For young children, socio-emotional and academic functioning are not separate realms of experience. We need to be very cautious in allowing accountability outcomes to drive instructional experiences for these children.

Conclusion

In sum, understanding school readiness requires attention to the child's developing social and academic competencies and to the ways in which these competencies are enhanced by experiences with adults in family and early education settings and in turn responded to by elementary classrooms. Great disparities exist in terms of children's competencies as they start school, as well as the opportunities to which they are exposed that could enhance those competencies.

In order to make progress toward the goal of ensuring that all children come to school ready to learn, we must make a concerted effort to broaden our ideas about children's competencies beyond academic skills, enhance the likelihood of exposure to high-quality early educational environments, and learn how to build upon those competencies in kindergarten and thereafter.

References

Adams, M. J. (1990). *Beginning to read: Thinking and learning about print.* Cambridge, MA: The MIT Press.

Barkley, R. A. (1994). The assessment of attention in children. In G. R. Lyon (Ed.), *Frames of reference for the assessment of learning disabilities: New views on measurement issues* (pp. 69-102). Baltimore: Brookes Publishing Company.

Birch, S. H., and Ladd, G. W. (1998). Children's interpersonal behaviors and the teacher-child relationship. *Developmental Psychology, 34,* 934-946.

Blachman, B. (1994). Early literacy acquisition: The role of phonological awareness. In G. P. Wallach and K. G. Butler (Eds.), *Language learning disabilities in school-age children and adolescents* (pp. 253-274). New York: Merrill.

Bowman, B., Donovan, M.S., and Burns, M.S., editors. 2000. *Eager to learn: Educating our preschoolers (Executive Summary).* Washington, DC: National Academy Press.

Bryant, MacLean, M., Bradley, L., and Crossland, J. (1990). Rhyme and alliteration, phoneme detection, and learning to read. *Developmental Psychology, 26,* 429-438.

Cost, Quality, and Child Outcomes Study Team (1995, June). *Cost, quality and child outcomes in child care centers, technical report.* Denver: University of Colorado at Denver, Department of Economics, Center for Research in Economic and Social Policy.

Denham, S. A., and Burton, R. (1995). *A social-emotional intervention program for at-risk four-year-olds.* Manuscript submitted for publication.

Denton, D. 2001. *Improving children's readiness for school: Preschool programs make a difference, but quality counts!* Atlanta, GA: Southern Regional Education Board.

Dwyer, M. C., Chait, R., and McKee, P. 2000. *Building strong foundations for learning: The U.S. Department of Education's guide to high quality early childhood education Programs.* Washington, DC: U.S. Department of Education.

Entwisle, D. R. and Alexander, K. (1999). Early schooling and social stratification. In Pianta, R. C. and Cox, M. J. (Eds.). *The transition to kindergarten.* Baltimore, MD: Paul H. Brookes.

Feagans, L.V., and Farran, D.C. (1996). The effects of daycare intervention in the preschool years on the narrative skills of poverty children in kindergarten. *International Journal of Behavioral Development, 17* (3), 503-523.

Funders and Agencies Work Group (November, 1999). *Socioemotional school readiness.* Paper presented at the meeting of the Funders and Agencies Work Group, Elkridge, MD.

Graue, E. (1999). Integrating diverse perspectives on kindergarten contexts and practice. In Pianta, R. C. and Cox, M. J. (Eds.). *The transition to kindergarten.* Baltimore, MD: Paul H. Brookes.

Greenberg, M.. T., Speltz, M. L., and DeKlyen, M. (1993). The role of attachment in the early development of disruptive behavior disorders. *Development and Psychopathology, 5,* 191-213.

BEST AVAILABLE

Hart, B., and Risley, T. R. (1995). *Meaningful differences in the everyday experience of young American children.* Baltimore, MD: Paul H. Brookes.

La Paro, K., and Pianta, R. C. (2001). Predicting children's competence in the early school years: A meta-analytic review. *Review of Educational Research,* 70(4), 443-484.

Love, J. M., Aber, J. A., and Brooks-Gunn, J. (1992). *Strategies for assessing community progress toward achieving the first national goal.* Princeton, NJ: Mathematica Policy Research, Inc.

McKinney, J., and Feagans, L. (1987). Current issues in research and services for learning disabled children in the United States. *Padoperrise,* 1, 91-107.

Meisels, S.J. (1999). Assessing readiness. In R.C. Pianta and M.Cox (Eds.) *The transition to kindergarten: Research, policy, training, and practice.* Baltimore, MD: Paul Brookes Publishers.

National Center for Early Development Learning. (2002). *Building blocks for success: State efforts in early childhood education. Chapel Hill, NC: NCEDL.*

National Center for Education Statistics (2000). *America's kindergartners.* Washington, D.C.: U. S. Government Printing Office.

National Research Council Committee on Early Childhood Pedagogy (2001). *Eager to learn.* Washington, D.C.: National Academy Press.

NICHD Early Child Care Research Network. (in press a). *Early child care and children's development prior to school entry. American Educational Research Journal.*

NICHD Early Child Care Research Network. (in press b). The relation of global first grade classroom environment to structural classroom features, teacher, and student behaviors. *Elementary School Journal.*

NICHD Early Child Care Research Network. (1999). Child outcomes when child care center classes meet recommended standards for quality." *American Journal of Public Health,* 89(7), 1072-1077

Peth-Pierce, Robin. Undated. *A good beginning: Sending America's children to school with the social and emotional competence they need to succeed.* Bethesda, MD: The Child Mental Health Foundations and Agencies Network.

Pianta, R. C., and Harbers, K. (1996). Observing mother and child behavior in a problem solving situation at school entry: Relations with academic achievement. *Journal of School Psychology,* 34, 307-322.

Pianta, R., La Paro, K., Payne, C., Cox, M., and Bradley, R. (2002). The relation of kindergarten classroom environment to teacher, family, and school characteristics and child outcomes. *Elementary School Journal,* 102 (3), 225-238.

Pianta, R.C., and McCoy, S. (1997). The first day of school: The predictive validity of early school screening. *Journal of Applied Developmental Psychology,* 18, 1-22.

Pianta, R. C., Smith, N., and Reeve, R. (1991). Observing mother and child behavior in a problem-solving situation at school entry: Relations with classroom adjustment. *School Psychology Quarterly,* 6, 1-16.

Pianta, R. C., and Walsh, D. J. (1996). *High risk children in the schools: Creating sustaining relationships.* New York: Routledge

Ramey, C. T., and Campbell, F. A. (1984). Preventive education for high-risk children: Cognitive consequences of the Carolina Abecedarian Project. *American Journal of Mental Deficiency,* 88, 515-523.

Ramey, C. T., and Campbell, F. A. (1991). Poverty, early childhood education, and academic competence. In A. Huston (Ed.), *Children in poverty: Child development and public policy* (pp. 190-221). New York: Cambridge University Press.

Ramey, S. L. and Ramey, C. T. (1999). The transition to school for "at-risk" children. In Pianta, R. C. and Cox, M. J. (Eds.), *The transition to kindergarten.* Baltimore, MD: Paul H. Brookes.

Ready for School Goal Team. 2000. *School Readiness in North Carolina: Strategies for Defining, Measuring, and Promoting Success for ALL CHILDREN.* Greensboro, NC: SERVE.

Resource Group on School Readiness of the National Educational Goals Panel. Undated. Readiness for School: An Interim Report From the Resource Group on School Readiness in *Resource Group Interim Reports.* Washington, DC: Online: National Educational Goals Panel. www.negp.gov/issues/publication/negpdocs/38.html

Rimm-Kaufman, S. E., Pianta, R. C., and Cox, M. J. (2000). Teacher's judgments of problems in the transition to kindergarten. *Early Childhood Research Quarterly,* 15(2), 147-166.

Shonkoff, J. and Phillips, D. (2000). *From neurons to neighborhoods: The science of early childhood development.* Washington, D.C.: National Academy Press.

Vernon-Feagans, L. (1996). *Children's talk in communities and classrooms.* Cambridge, MA: Blackwell Publishers.

West, J., Denton, k., and Germino-Hausken, e.. America's kindergartners: Findings from the Early Childhood Longitudinal Study, Kindergarten Class of 1998-99: Fall 1998. *Education Statistics Quarterly* (Spring 2000). Online: nces.ed.gov/pubs2000/qrtlyspring/2feat/q2-1.html

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